

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333392-935

Luminaire Tested: **S125DIW-S610D1340U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333392-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S610D1340U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6772.8 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

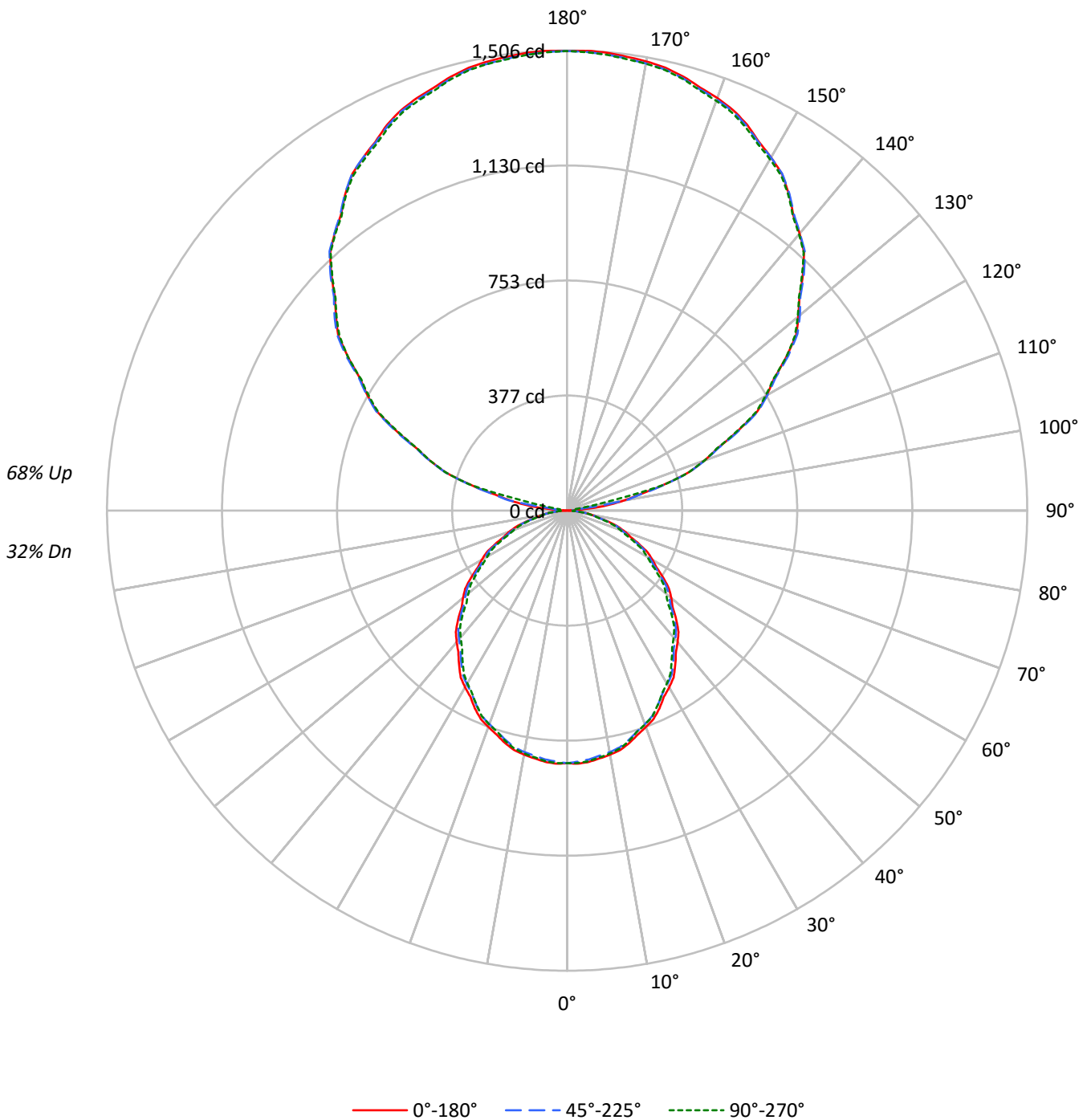
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	56	56	56	39	39	39	32
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	49	43	40	38	31	29	28	22
3	78	69	61	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	48	36	28	24	43	32	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	1.2
10°-20°	220.2	3.3
20°-30°	325.2	4.8
30°-40°	379.4	5.6
40°-50°	381.1	5.6
50°-60°	334.5	4.9
60°-70°	249.3	3.7
70°-80°	142.5	2.1
80°-90°	44.6	0.7
90°-100°	54.6	0.8
100°-110°	336.8	5.0
110°-120°	610.9	9.0
120°-130°	783.9	11.6
130°-140°	843.2	12.4
140°-150°	791.5	11.7
150°-160°	640.2	9.5
160°-170°	414.1	6.1
170°-180°	142.8	2.1
0°-30°	623.4	9.2
0°-40°	1002.8	14.8
0°-60°	1718.4	25.4
0°-90°	2154.8	31.8
90°-120°	1002.3	14.8
90°-150°	3420.9	50.5
90°-180°	4618.0	68.2
0°-180°	6772.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	1	10	18	23	27	5
95°	64	58	18	23	23	81
105°	328	332	332	332	331	347
115°	615	621	622	617	611	610
125°	875	882	883	878	875	781
135°	1091	1098	1096	1093	1087	841
145°	1265	1267	1268	1268	1262	791
155°	1393	1387	1389	1392	1384	642
165°	1470	1464	1465	1471	1463	415
175°	1504	1498	1498	1506	1497	143
180°	1504	1504	1504	1504	1504	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.4	14.7	15.2	15.6	15.9	16.3	16.4	16.7	17.0	17.1	17.4
90°	1.1	3.1	5.1	7.1	9.0	10.9	12.7	14.4	16.1	17.8	19.1
92.5°	17.1	15.8	14.4	13.0	11.6	11.7	13.3	14.7	16.3	17.8	19.1
95°	63.5	62.8	62.1	61.3	60.5	55.4	46.1	36.7	27.2	17.8	19.1
97.5°	132.7	134.0	135.3	136.6	138.0	129.3	110.7	92.1	73.4	54.8	47.9
100°	186.1	186.9	187.6	188.4	189.2	190.0	191.0	192.0	193.0	194.0	157.0
102.5°	240.6	241.5	242.5	243.4	244.4	245.1	245.7	246.3	246.8	247.5	240.5
105°	327.8	328.7	329.8	330.7	331.7	332.2	332.2	332.2	332.2	332.2	332.2
107.5°	418.3	418.3	418.3	418.3	418.3	418.5	419.0	419.5	420.0	420.5	420.5
110°	477.2	477.2	477.2	477.2	477.2	477.3	477.9	478.4	478.9	479.3	478.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	532.4	533.0	533.6	534.2	534.8	535.3	535.5	535.8	536.1	536.4	535.5
115°	615.4	616.6	617.9	619.1	620.4	621.0	621.3	621.6	621.8	622.1	621.0
117.5°	701.2	701.1	701.1	701.0	701.0	701.5	702.4	703.4	704.3	705.2	704.0
120°	754.7	754.5	754.2	754.0	753.7	754.0	754.7	755.4	756.2	756.9	756.5
122.5°	801.9	802.9	803.8	804.8	805.7	806.4	806.8	807.1	807.4	807.8	807.3
125°	875.1	876.8	878.6	880.3	882.0	882.9	882.9	882.9	882.9	882.9	881.9
127.5°	944.9	946.2	947.4	948.6	949.9	950.4	950.2	950.1	949.9	949.8	949.3
130°	987.7	988.9	990.2	991.4	992.6	993.4	993.7	993.9	994.1	994.4	993.7
132.5°	1030.5	1031.9	1033.4	1034.8	1036.2	1036.7	1036.1	1035.6	1035.1	1034.5	1034.4
135°	1091.4	1092.9	1094.3	1095.8	1097.3	1097.8	1097.3	1096.8	1096.3	1095.8	1095.4
137.5°	1147.4	1148.6	1149.9	1151.2	1152.4	1152.9	1152.4	1152.0	1151.6	1151.2	1151.2
140°	1183.9	1184.4	1184.9	1185.3	1185.9	1186.0	1185.8	1185.5	1185.3	1185.0	1185.5
142.5°	1216.9	1217.2	1217.5	1217.8	1218.1	1218.4	1218.7	1219.1	1219.4	1219.8	1219.9
145°	1265.2	1265.8	1266.3	1266.8	1267.2	1267.5	1267.5	1267.5	1267.5	1267.5	1267.7
147.5°	1307.6	1307.5	1307.4	1307.3	1307.3	1307.3	1307.6	1307.9	1308.2	1308.5	1308.8
150°	1334.4	1333.9	1333.4	1332.9	1332.4	1332.4	1332.9	1333.4	1333.9	1334.4	1334.9
152.5°	1360.2	1359.2	1358.1	1357.0	1355.9	1355.6	1356.1	1356.6	1357.1	1357.5	1358.1
155°	1393.4	1392.0	1390.5	1389.1	1387.5	1387.1	1387.5	1388.0	1388.5	1389.1	1389.7
157.5°	1419.1	1418.2	1417.3	1416.4	1415.6	1415.1	1415.1	1415.2	1415.3	1415.3	1416.1
160°	1436.9	1435.5	1434.0	1432.4	1431.0	1430.4	1430.6	1430.9	1431.2	1431.4	1432.4
162.5°	1451.2	1449.8	1448.2	1446.7	1445.3	1444.7	1444.9	1445.2	1445.4	1445.6	1447.0
165°	1470.4	1468.9	1467.4	1465.9	1464.5	1463.8	1464.0	1464.3	1464.6	1464.8	1466.3
167.5°	1484.6	1483.2	1481.6	1480.1	1478.5	1477.9	1478.1	1478.3	1478.6	1478.9	1480.7
170°	1492.7	1491.0	1489.2	1487.5	1485.7	1485.0	1485.2	1485.5	1485.7	1486.0	1488.0
172.5°	1498.1	1496.3	1494.6	1492.8	1491.1	1490.5	1490.9	1491.3	1491.8	1492.2	1494.0
175°	1503.8	1502.4	1500.9	1499.3	1497.9	1497.3	1497.5	1497.8	1498.1	1498.2	1500.2
177.5°	1506.5	1505.3	1504.2	1503.0	1501.8	1501.2	1501.5	1501.7	1501.8	1502.0	1503.5
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	17.7	17.9	18.2	18.3	18.2	18.1	18.0	17.9
90°	20.3	21.5	22.8	23.8	24.5	25.2	26.0	26.8
92.5°	20.3	21.5	22.8	23.6	23.9	24.3	24.6	25.0
95°	20.3	21.5	22.8	23.4	23.4	23.4	23.4	23.4
97.5°	40.9	33.9	26.9	23.4	23.4	23.4	23.4	23.4
100°	120.1	83.3	46.3	27.4	26.3	25.4	24.4	23.4
102.5°	233.5	226.5	219.6	207.6	190.8	173.9	157.0	140.3
105°	332.2	332.2	332.2	332.1	331.8	331.6	331.3	331.1
107.5°	420.6	420.7	420.7	420.3	419.6	418.9	418.1	417.4
110°	477.9	477.2	476.4	476.1	476.4	476.6	476.9	477.2



TEST NUMBER: P333392-935

CATALOG NUMBER: S125DIW-S610D1340U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	534.5	533.6	532.7	532.0	531.7	531.3	531.0	530.6
115°	620.1	619.1	618.1	616.8	615.4	613.9	612.3	610.9
117.5°	702.7	701.4	700.1	699.0	698.4	697.8	697.2	696.5
120°	756.0	755.4	754.9	754.1	752.9	751.6	750.4	749.2
122.5°	806.8	806.2	805.8	804.8	803.4	801.9	800.5	799.1
125°	880.9	879.9	878.9	878.0	877.4	876.6	875.8	875.1
127.5°	948.7	948.1	947.6	946.4	944.6	942.8	940.9	939.1
130°	992.9	992.1	991.4	990.4	989.2	987.9	986.7	985.5
132.5°	1034.2	1034.1	1033.9	1033.2	1032.0	1030.8	1029.5	1028.3
135°	1094.8	1094.3	1093.8	1092.9	1091.4	1089.9	1088.4	1086.9
137.5°	1151.3	1151.4	1151.5	1150.9	1149.6	1148.3	1147.0	1145.7
140°	1186.0	1186.5	1187.0	1186.5	1185.0	1183.5	1182.1	1180.5
142.5°	1220.0	1220.1	1220.2	1219.5	1218.0	1216.5	1215.0	1213.6
145°	1268.0	1268.3	1268.5	1267.9	1266.4	1264.9	1263.4	1262.0
147.5°	1309.2	1309.4	1309.8	1309.0	1307.2	1305.4	1303.6	1301.8
150°	1335.4	1335.8	1336.4	1335.6	1333.6	1331.6	1329.6	1327.7
152.5°	1358.6	1359.1	1359.5	1358.9	1357.1	1355.4	1353.6	1351.8
155°	1390.5	1391.2	1392.0	1391.4	1389.4	1387.4	1385.4	1383.5
157.5°	1416.9	1417.7	1418.5	1417.9	1415.9	1413.9	1412.0	1410.0
160°	1433.4	1434.3	1435.4	1434.9	1432.9	1430.9	1428.9	1426.9
162.5°	1448.4	1449.8	1451.2	1450.8	1448.6	1446.4	1444.2	1442.1
165°	1467.7	1469.3	1470.8	1470.5	1468.5	1466.5	1464.6	1462.6
167.5°	1482.5	1484.2	1486.0	1485.7	1483.5	1481.4	1479.1	1476.9
170°	1490.0	1491.9	1493.9	1493.8	1491.6	1489.4	1487.1	1484.9
172.5°	1495.8	1497.6	1499.3	1499.2	1496.9	1494.7	1492.5	1490.2
175°	1502.2	1504.2	1506.1	1506.1	1503.8	1501.6	1499.3	1497.1
177.5°	1504.9	1506.2	1507.6	1507.5	1505.9	1504.3	1502.7	1501.2
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8

(END OF REPORT)